

R E M A R K S

Applicant respectfully requests further examination and reconsideration in view of the amendments made above and the arguments set forth fully below. Claims 1-10, 12-26, 28-40, and 42-58 were previously pending in this application. Claims 1-10, 12-26, 28-40, and 42-58 stand rejected. By the above amendments, Claims 1, 17, 32, 48, and 54 are amended. Accordingly, Claims 1-10, 12-26, 28-40, and 42-58 are currently pending in this application.

Rejections Under 35 U.S.C. § 102

Within the Office Action, Claims 1-10, 12-26, 28-40, and 42-58 stand rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 6,363,348 issued to Besling et al. (hereafter "Besling"). The Applicant respectfully traverses this rejection.

Besling teaches a distributed pattern recognition system including multiple user stations and a server station. The user station takes a spoken input user sample, analyzes the sample and groups the outcome of the analysis into data blocks to be transferred to the server unit. The server unit stores a plurality of different acoustic models, referred to as recognition models. The information sent from the user unit in the data blocks, referred to as model improvement data, is used to select one model from the plurality of different recognition models that best fits the input user sample. This selected one recognition model is then used for speech recognition of subsequent user input.

Besling teaches that each of the plurality of recognition models are each formed by combining a basic recognition model and one of a plurality of adaptation profiles. A specific one adaptation profile is selected by determining which adaptation profile best fits the model improvement data (input user sample). The selected adaptation profile is then applied to the basic recognition model to form a recognition model which is used by the speech recognition system. The specific adaptation profile is selected by analyzing the input user sample and matching the input user sample to a collection of pre-existing adaptation profiles. When a best match to a particular one adaptation profile is determined, a notation is made to associate the user with the selected adaptation profile. Since multiple users use the speech recognition system of Besling, any number of users can be matched to a particular one of the adaptation profiles. In other words, each adaptation profile can be associated with any number of individual users. As such, the recognition model, which is an acoustic model resulting from the selected adaptation

profile applied to the basic recognition model, is not unique to a specific user. Instead, the recognition model is used by any or all users that are matched to the particular adaptation profile used to generate the recognition model.

Besling teaches that the input user sample is used to determine a best match adaptation profile, where the selected adaptation profile is pre-existing. The adaptation profile is not modified in any way by the input user sample. In other words, the input user sample is not incorporated into the adaptation profile to generate a modified adaptation profile. Since the adaptation profile can not be modified, the recognition model which is generated using the adaptation profile also can not be modified. In fact, Besling teaches that the input user sample is used for comparative purposes only. That is, the input user sample is compared to existing acoustic models, where each acoustic model corresponds to a particular adaptation profile. The comparison is made to determine the acoustic model (adaptation profile) that best matches the input user sample. Besling teaches that the input user sample is not actually incorporated into an existing acoustic model. Therefore, Besling does not teach incorporating an input user sample into the adaptation profile, and therefore also does not teach incorporating the input user sample into the recognition model generated using the adaptation profile. Further, Besling does not teach incorporating the input user sample into the recognition model to form a modified recognition model specifically associated with the user.

In contrast to the teachings of Besling, the speech recognition system of the present invention provides for speaker-specific acoustic models to be used in the speech recognition process, where the speaker-specific acoustic models are modified by incorporating samples of a speaker's speech. Multiple users can access the same application, each user having an individualized speaker-specific acoustic model which is stored, retrieved from storage, and modified according to samples of the specific speaker's speech. By utilizing speaker-specific models which are uniquely tailored to the individual user, the speech recognition system of the present invention greatly improves the accuracy of speech recognition over that of a generalized speech recognition system. Further, the speaker-specific acoustic model does not require direct user feedback to be modified. The present invention eliminates the inconvenience of requiring user feedback and as a result improves efficiency by automatically modifying the speaker-specific acoustic models based on the received samples of the specific speaker's speech. Besling does not teach the use of speaker-specific acoustic models that are modified by incorporating

samples of the specific speaker's speech into the speaker-specific acoustic model..

The amended independent Claim 1 is directed to a method of adapting a speech recognition system. The method of Claim 1 includes the steps of obtaining an identification of a speaker, obtaining a sample of a speaker's speech during a first remote session, recognizing the speaker's speech utilizing the speech recognition system during the first remote session, modifying the speech recognition system by incorporating the sample into the speech recognition system thereby forming a speaker-specific modified speech recognition system, storing a representation of the speaker-specific modified speech recognition system in association with the identification of the speaker, and using the representation of the speaker-specific modified speech recognition system to recognize speech during a subsequent remote session with the speaker. As discussed above, Besling does not teach incorporating user-specific speech samples into the speech recognition system to form a speaker-specific speech modified recognition system. For at least these reasons, the independent Claim 1 is allowable over Besling.

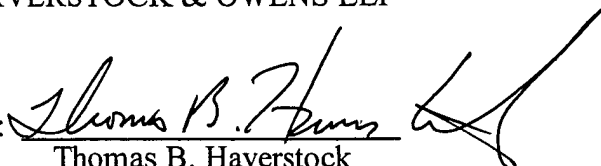
Claims 2-10 and 12-16 are each dependent upon the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Besling. Accordingly, Claims 2-10 and 12-16 are each also allowable as being dependent upon an allowable base claim.

Within the Office Action, Claims 17-26, 28-40, and 42-58 have been rejected as having similar limitations as Claims 1-10 and 12-16. The Applicant respectfully traverses these rejections for at least the same reasons as discussed above pertaining to Claims 1-10 and 12-16.

For the reasons given above, Applicant respectfully submits that all of the claims are in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, he is encouraged to call the undersigned at (650) 833-0160 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

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By: 
Thomas B. Haverstock
Reg. No. 32,571
Attorneys for Applicants